

REMARKS

Claims 1-3 are pending in the present application, with claim 1 being the sole independent claim. Applicants submit that no new matter has been introduced by this Amendment.

The Presently-Claimed Invention

The presently-claimed invention relates to a multilayer paint substitute film consisting of a clear coat layer, a color coat layer in which metallic pigments are dispersed, and an adhesive layer, wherein the color coat layer further includes orientation inhibitors for inhibiting orientation of the metallic pigments.

Claim Rejections under 35 U.S.C. §§ 102/103

Komatsu

Claims 1-3 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being unpatentable over Komatsu et al. (U.S. Patent No. 6,096,378, hereafter, "Komatsu").

Komatsu discloses a multilayer film having three separate pigmented layers, where the two pigmented coating layers adjacent to the primer layer are not metallic, and the uppermost pigmented coating layer is a pearl-like coating containing scaly mica coated with titanium oxide.

The Office Action indicates that Komatsu discloses a multilayer film comprising a primer coating, a coloring base coating, and a clear coating. The Office Action alleges that the primer coating of Komatsu is equivalent to the adhesive layer of the claimed

invention, because the primer layer is adhered to the substrate. The coloring base coating of Komatsu includes a titanium white pigment (the Office Action takes the position that this is an orientation inhibitor), and an aluminum flake (the Office Action takes the position that this is a metallic pigment). The Office Action further takes the position that Komatsu discloses use of an intermediate coating containing fine aluminum powder having an average particle diameter of 3-7 μm , and titanium oxide pigments having an average particle diameter of 5 μm or less.

However, the paint substitute film of the presently-claimed invention consists of a clear coat layer, a color coat layer in which metallic pigments are dispersed, and an adhesive layer, wherein the color coat layer further includes orientation inhibitors for inhibiting orientation of the metallic pigments. The paint substitute film of the presently-claimed invention does not include multiple color coat layers, and does not include an upper pearl-like coating layer containing scaly mica coated with titanium oxide.

Further, in addition to having a different structure than the multilayer paint substitute film of the presently-claimed invention, Applicants submit that the film of Komatsu is not suitable for drawing/stretching. Komatsu aims to provide a thin film with "hiding power" that is capable of hiding a base color of the substrate to which the film is applied. The film of Komatsu may provide improved hiding power, and resistance to chipping, but it does not inhibit orientation caused by drawing/stretching the film during application to the substrate. If drawn or stretched, the film of Komatsu would suffer from deteriorated hiding power, reducing its marketability. The film of Komatsu therefore cannot be applied to areas of a substrate that require drawing/stretching in order for the film to be applied (e.g., a convexly curved area).

Accordingly, Applicants submit that claims 1-3 are not anticipated by and/or

unpatentable over Komatsu. Applicants therefore respectfully request that this rejection be withdrawn.

Komatsu and McCarthy et al.

Claims 1-3 were also rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Komatsu and McCarthy et al. (U.S. Patent No. 5,989,696, hereafter, "McCarthy").

The Office Action indicates that McCarthy discloses the use of glass beads and powder as extender pigments. The Office Action takes the position that one skilled in the art would combine the disclosures of Komatsu and McCarthy because Komatsu discloses use of extender pigments in a coloring base coating, and because hollow glass spheres are known for use as extender pigments as disclosed by McCarthy.

McCarthy relates to a paper or cardboard substrate having a static-reducing layer including a hectorite clay, which is in turn coated with a second layer having a pigment, which may include an extender. A plastic overlay may be provided on top of the pigment coating layer to provide an oxygen barrier. Although McCarthy discloses hollow glass spheres as extenders/orientation inhibitors, solid glass beads are not specifically mentioned.

McCarthy does not disclose a multilayer paint substitute film consisting of a clear coat layer, a color coat layer in which metallic pigments are dispersed, and an adhesive layer, wherein the color coat layer further includes orientation inhibitors for inhibiting orientation of the metallic pigments selected from glass beads, glass powder, and an extender. Therefore, the disclosure of McCarthy fails to remedy the deficiencies of

Komatsu, which are discussed above.

Accordingly, Applicants submit that claims 1-3 are not unpatentable over the combination of Komatsu and McCarthy. Applicants therefore respectfully request that this rejection be withdrawn.

JP 2000-085075

Claims 1 and 2 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over JP 2000-085075.

JP 2000-085075 discloses a technique for integrally forming a color coating that is layered on a plastic component during an injection molding process by inserting a preformed sheet into a mold, followed by injection of resin, in order to address the problem whereby the exterior appearance of molded articles is deteriorated due to surface irregularities. JP 2000-085075 discloses a composite film for use in thermoforming that has a copolymer base, an adhering layer, a colored layer including aluminum flake and a titanium oxide coloring agent, and an upper transparent layer. The copolymer base layer includes (a) a propylene ethylene random copolymer; (b) a low-density polyethylene or linear low-density polyethylene which is 10-30 parts by weight to 100 parts by weight of (a); and (c) talc having an average particle diameter of 10 μm or less, which is 5-40 parts by weight to 100 parts by weight of (a) and (b). The composite film is designed to be inserted into an injection mold prior to molding a part, and resin is injected into the mold and unifies with the composite film. The size of the aluminum flake and titanium oxide particles contained in the colored layer are not disclosed, and there is no disclosure of including orientation inhibitors for inhibiting

orientation of metallic pigments.

The Office Action indicates that JP 2000-085075 discloses a multilayer coating substitution film including a transparent layer, a colored layer, and an adhesive layer. The colored layer may include various mixtures of pigments, such as titanium oxide and aluminum flake.

However, the paint substitute film of the presently-claimed invention consists of a clear coat layer, a color coat layer in which metallic pigments are dispersed, and an adhesive layer, wherein the color coat layer further includes orientation inhibitors for inhibiting orientation of the metallic pigments. The paint substitute film of the presently-claimed invention does not include a lower copolymer base film provided under the adhering layer.

Accordingly, Applicants submit that claims 1-2 are not unpatentable over JP 2000-085075. Applicants therefore respectfully request that this rejection be withdrawn.

JP 2000-085075 and Komatsu or JP 2002-294163

Claims 1-3 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over JP 2000-085075 in view of either Komatsu or JP 2002-294163.

The Office Action indicates that Komatsu and JP 2002-294163 disclose titanium oxide pigments having an average particle diameter of 5 μm or less. The Office Action takes the position that one skilled in the art would combine the disclosures of JP 2000-085075 and either or both of Komatsu and JP 2002-294163, because use of titanium oxide having these average particle diameters is known in the art.

JP 2002-294163 discloses a touch-up paint formulation including a

photoluminescent pigment. The formulation may include titanium oxide as an inorganic particle. The formulation appears to include at least one type of particle having a particle diameter of from 5 μm to 30 μm , and a second type of particle having a particle diameter of 5 μm or less.

Komatsu discloses a multilayer film comprising a primer coating, three coloring layers including an intermediate coating, a coloring base coating, and a pearl-like base coating, and a clear coating. Komatsu discloses an intermediate coating layer containing fine aluminum powder having an average particle diameter of 3-7 μm , and titanium oxide pigments having an average particle diameter of 5 μm or less.

Although Komatsu and JP 2002-294163 disclose titanium oxide particles having an average particle diameters between 1 and 30 μm , they do not disclose a multilayer paint substitute film consisting of a clear coat layer, a color coat layer in which metallic pigments are dispersed, and an adhesive layer, wherein the color coat layer further includes orientation inhibitors for inhibiting orientation of the metallic pigments selected from glass beads, glass powder, and an extender. Therefore, Komatsu and JP 2002-294163 fail to remedy the deficiencies of JP 2000-085075, which are discussed above.

Accordingly, Applicants submit that claims 1-3 are not unpatentable over the combination of JP 2000-085075 and either of Komatsu or JP 2002-294163. Applicants therefore respectfully request that this rejection be withdrawn.

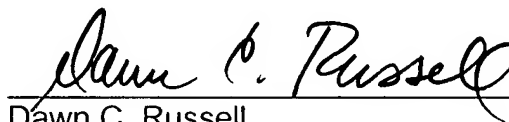
CONCLUSION

In view of the amendments and remarks set forth herein, Applicants submit that claims 1-3 are not anticipated by Komatsu, and are not unpatentable over any combination of Komatsu, McCarthy, JP 2002-294163, or JP 2000-085075. Applicants therefore respectfully request that all outstanding grounds of rejection be withdrawn.

In view of the above amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance of the claims are earnestly solicited. Should the Examiner believe anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the Applicants' undersigned attorney at the telephone number listed below.

In the event this paper is not deemed timely filed, Applicants respectfully petition for an appropriate extension of time. The Commissioner is authorized to charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300, making reference to Attorney Docket No. **106145-00075**.

Respectfully submitted,



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